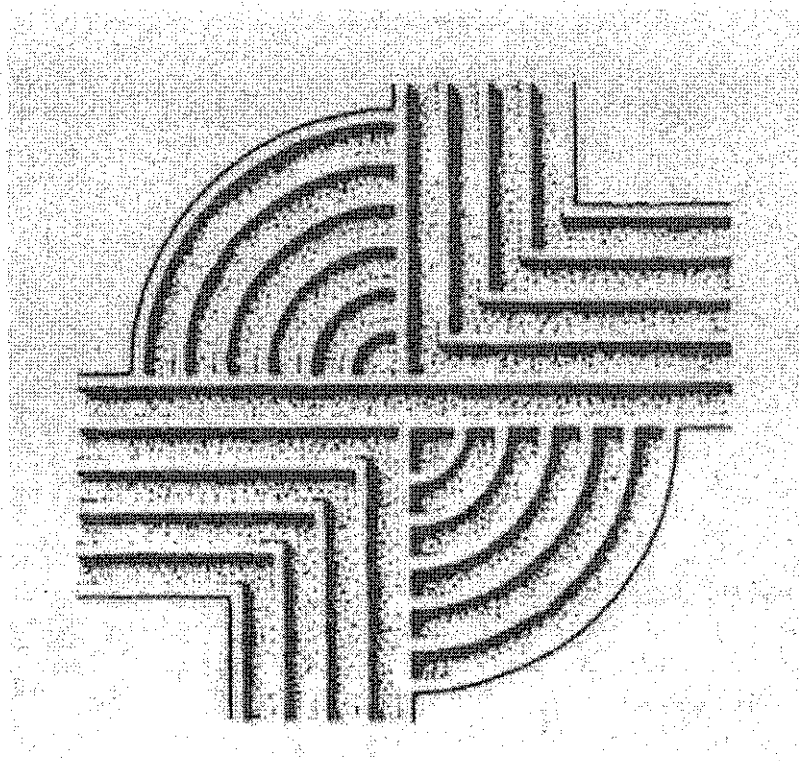


AN INTENSIVE ARCHAEOLOGICAL
SURVEY OF THE JFLP TRACT, HORRY
COUNTY, SOUTH CAROLINA



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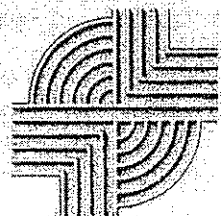
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AN INTENSIVE ARCHAEOLOGICAL SURVEY OF THE JFLP TRACT, HORRY COUNTY, SOUTH CAROLINA

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ABSTRACT

This study reports on an intensive archaeological survey of the approximately 2 acre parcel known as the JFLP tract, Horry County, South Carolina. The tract is situated off SC 544, about 1,500 feet southeast of the SC 544 and S 17 interchange and about 2 miles north of Surfside Beach. The tract is roughly rectangular and is proposed for commercial development. Access to the property will be by way of a road off SC 544 on the northwestern edge of the tract, crossing through wetlands.

The study was conducted by Dr. Michael Trinkley and Mr. Tom Covington of Chicora Foundation for The Brigman Company and is in anticipation of developing the tract for a restaurant. The work is intended to assist The Brigman Company and its client comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

Historic maps reveal that this portion of Horry County was sparsely settled well into the mid-twentieth century and it has only been within the past 50 years that the area has become a popular vacation area and development has intensified. Nevertheless, the area of potential effect (APE) for this project was defined as 1.0 mile. Four previously recorded archaeological sites were identified in the area. Sites 38HR44 and 38HR45, which produced a few sherds, were originally reported on the northeast side of SC 544 about 3,500 feet southeast of the project tract. More recent analysis suggests that these "sites" were road fill. Site 38HR223 is situated about a mile southeast of the survey tract and consists of a thin scatter of prehistoric pottery found during construction of a golf course. Site 38HR227 is also about a mile southeast of the JFLP tract. When reported in 1987 the site consisted of a series of discrete middens, also exposed during golf course construction.

Consultation with the S.C. Department of Archives and History GIS failed to identify any

National Register properties in the APE. Likewise, an examination of the available mapping for the previous Horry County architectural survey failed to identify any identified structures in the APE.

The intensive archaeological survey consisted of shovel testing at 100 foot intervals along transects laid out at 100 foot intervals covering the entire tract through the excavation of 24 shovel tests. The access route onto the tract was subjected to a pedestrian survey, although no shovel tests were excavated because of standing water. No archaeological sites were identified in the tract.

In addition, we conducted a survey of the APE by driving public roads and looking for any structures which were over 50 years of age and which retained integrity. None were identified.

It is possible that archaeological remains may be encountered in the project area during construction. Construction crews should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office or to Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No construction should take place in the vicinity of these late discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

TABLE OF CONTENTS

List of Figures		iv
Introduction		1
<i>Project Background</i>	1	
<i>Natural Environment</i>	1	
<i>Prehistoric and Historic Synthesis</i>	6	
<i>Previous Archaeological Studies</i>	14	
Methods and Results		15
<i>Background Investigations</i>	15	
<i>Field Methods</i>	15	
<i>Site Evaluations</i>	17	
<i>Survey Results</i>	18	
Summary and Recommendations		19
Sources Cited		21

LIST OF FIGURES

Figure

1.	Project vicinity in Horry County	2
2.	Project area on USGS topographic map	3
3.	Edge of the survey parcel fronting SC 544	5
4.	Vegetation on the interior of the tract	6
5.	Generalized cultural sequence for South Carolina	8
6.	Portion of Mouzon's 1775 map showing the project area	10
7.	Portion of Mills' <i>Atlas</i> showing the project area	11
8.	Portion of the 1939 <i>General Highway and Transportation Map of Horry County</i>	13
9.	Project tract showing the location of shovel tests	16

INTRODUCTION

Project Background

This work was conducted for Mr. Joe Floyd, The Brigman Company by Dr. Michael Trinkley, with assistance from Mr. Tom Covington, of Chicora Foundation. The project involves the historical and archaeological survey of the 2 acre JFLP tract. The project is situated on the north side of SC 544, about 1,500 feet southeast of the SC 544 and S 17 interchange and about 2 miles north of Surfside Beach in southern Horry County (Figures 1 and 2).

The survey tract fronts SC 544 to the southwest and has an irregular property line to the east, north, and northwest. Access to the property will be by way of a road crossing a wetland and small creek or channelized ditch on the western side of the parcel. The tract, in general, has a square shape, with the access area making it a rectangle. The tract ranges from densely to lightly wooded and this development will be the first on this northeast side of the highway. The opposite side of the road, however, is intensively developed with convenience stores and fast food restaurants.

The proposed development has the potential for a variety of direct effects to historic and archaeological sites. The construction of both utilities and the restaurant will result in the clearing and grubbing of the tract. The wetlands on the parcel are proposed to be filled. Many areas will be graded, although we suspect that in general much of the construction will be on fill sections. Primary effects in the construction area include destruction of any resources which might exist as well as siltation or other related damages. Secondary effects to historic structures and resources include the potential for nuisance dust and increased construction traffic. Given that this tract is fronted by existing development to the southwest and that SC 544 is being widened to four lanes northwest of

the US 17 interchange, we do not believe that the development will cause any significant visual intrusion into the landscape.

Background research included an examination of records at the S.C. Institute of Archaeology and Anthropology for information on previously recorded archaeological sites in the area, as well as an examination of the files of the S.C. Department of Archives and History for information on previous architectural surveys of the area, as well as for information on National Register sites in the study vicinity. Historical research consisted entirely of the examination of secondary sources and maps that might provide information on significant sites in the region.

The investigation consists of an archaeological survey of the 2 acre tract using shovel testing at 100 foot intervals. The architectural survey consisted of driving public roads and confirming the results of the previous Horry County architectural surveys.

The field investigation was conducted by Dr. Michael Trinkley and Mr. Tom Covington on October 10, 2000. A total of 12 person hours were spent on-site conducting the survey.

Natural Environment

Physiographic Province

The project area is situated at the southern edge of Horry County, about 3 miles north of the Georgetown County line. The level topography in the region is interrupted by only occasional marsh sloughs and small wetland depressions. In the project tract there is one such wetland, partially channelized, running along the northwestern edge of the survey tract.

In general, the topography slopes to the

ARCHAEOLOGICAL SURVEY OF THE JFLP TRACT

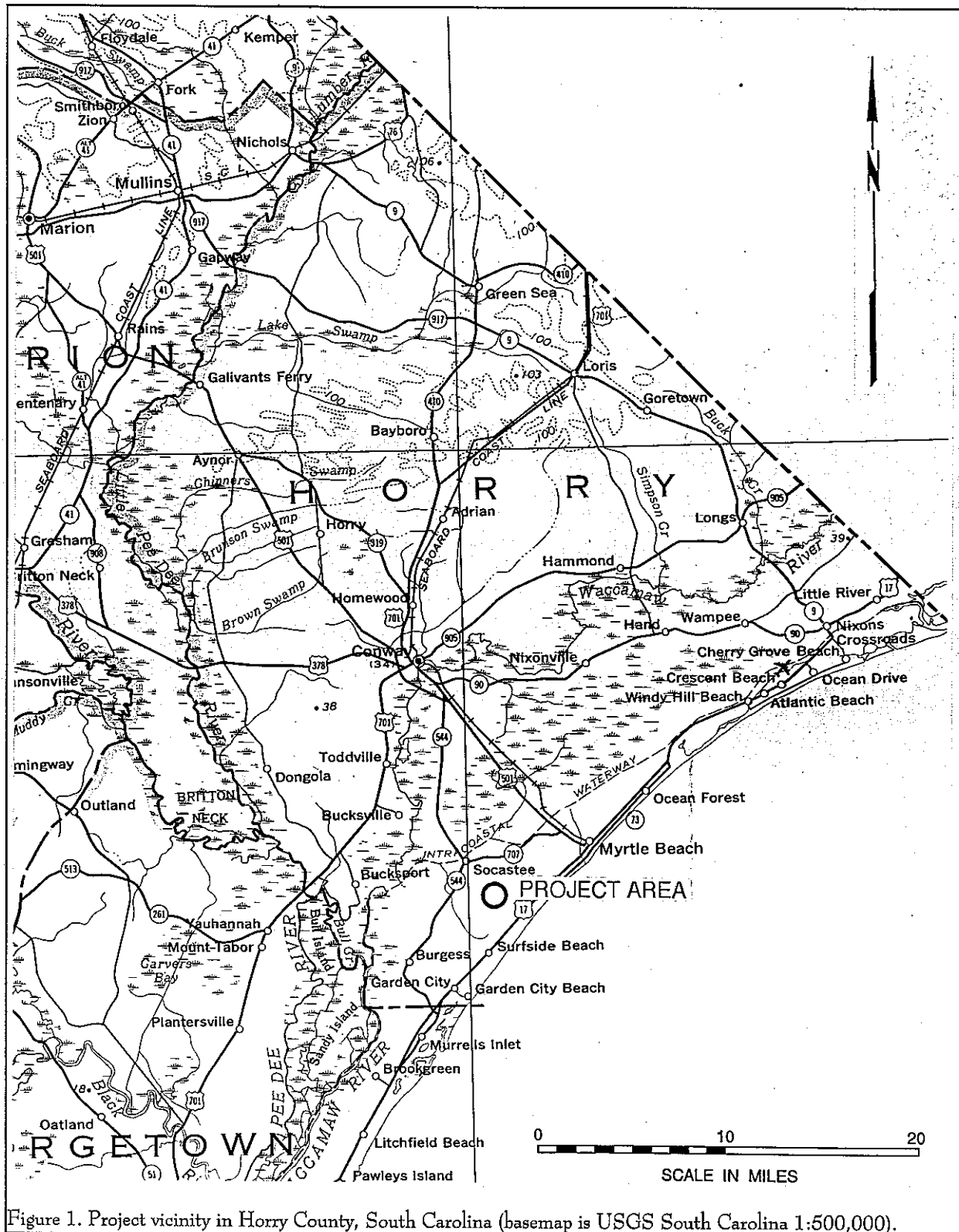


Figure 1. Project vicinity in Horry County, South Carolina (basemap is USGS South Carolina 1:500,000).

INTRODUCTION

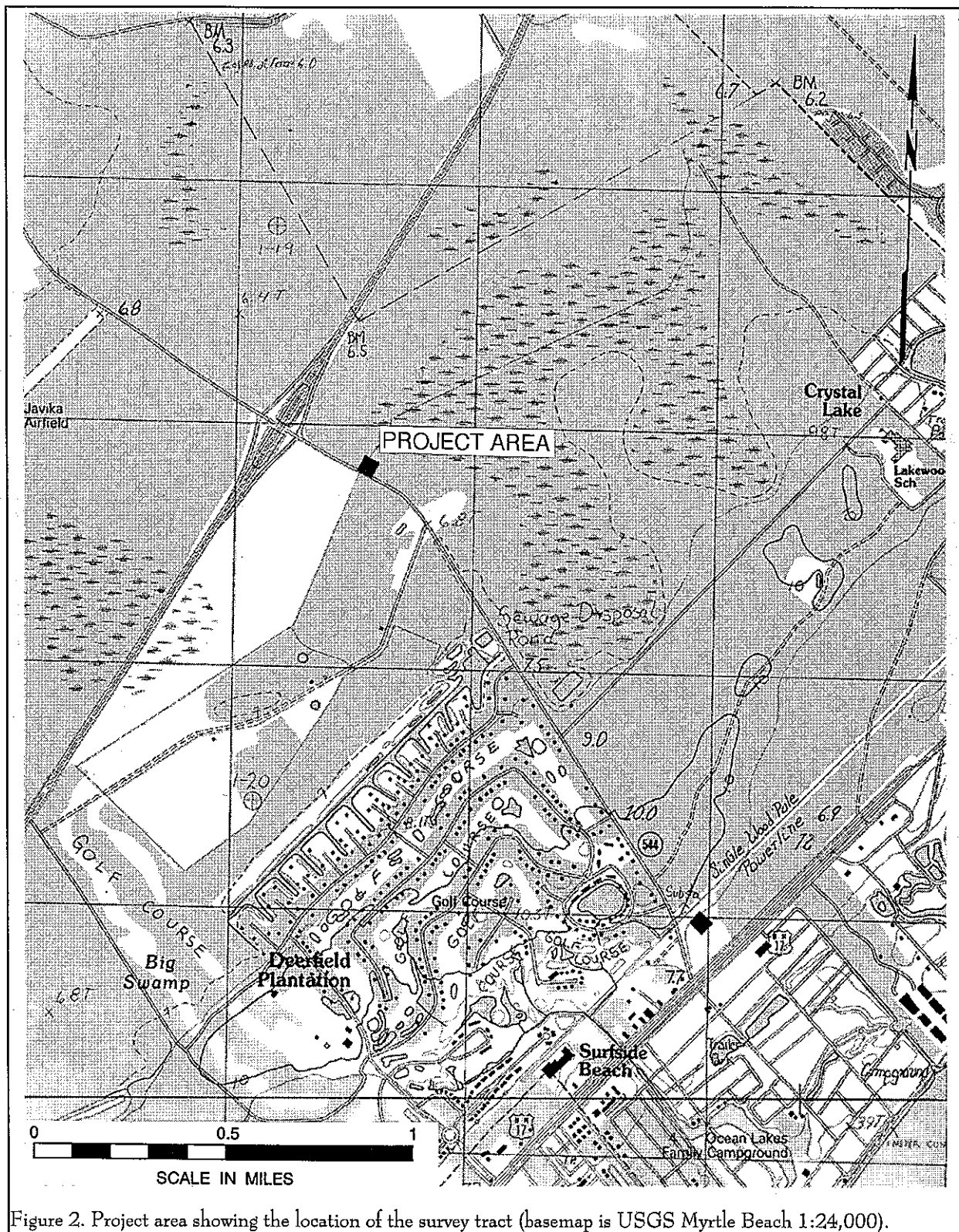


Figure 2. Project area showing the location of the survey tract (basemap is USGS Myrtle Beach 1:24,000).

northeast, toward a significant wetland area about 1,000 feet away. On a regional scale the topography slopes either west toward the Little Pee Dee or Lumber rivers or south and southwest toward the Waccamaw River. The Waccamaw essentially bisects the county into east and west halves and drains numerous swamps between the river and the Atlantic Ocean. The closest major drainage to the project area is the Socastee Creek which formed the general route for the Intracoastal Waterway in this area. There are several drainages flowing westwardly to the remnants of Socastee Creek both to the north and south of the project area. More dominant on the landscape, however, are the lowland swamps that are found throughout the area, including the one just west and north of the survey tract.

Horry County is bounded to the north by Brunswick and Columbus counties, North Carolina, to the east by the Atlantic Ocean, to the south by Georgetown County, and to the west by Dillon and Marion counties. It lies within the Lower Coastal Plain which is made up of fluvial deposits that contain varying amounts of sand, silt, and clay (Dudley 1986). This is also the area known as the Atlantic Coast Flatwoods which extends from the sea shore inland about 30 to 70 miles. The area is characterized by broad flats and depressions. While there are areas of well drained soils, much of the flatwoods consist of poorly drained soils with clay subsoils, especially near the coast (Ellerbe 1974:18).

Elevations may range from sea level to about 100 feet above mean sea level in the Lower Coastal Plain. In the project area there are no areas where the land is higher than about 23 feet above mean sea level (AMSL), and much of the area may actually be lower. A noticeable characteristic of this physiographic area is how gradually the flat lands seem to grade into either freshwater marshes, savannahs, or swamps.

Geology and Soils

The geology of the Lower Coastal Plain has been well described by Cooke (1936) who notes that from the Cape Fear River in North Carolina to Winyah Bay in South Carolina, the coast forms a "great arc scooped out by waves" (Cooke 1936:4). This area has been described by Brown (1975) as being an arcuate

strand. In this area salt marshes are poorly developed or absent and few tidal inlets breach the coast (Smith 1933:20-21). The situation is the result of an erosional history about 100,000 years ago. In general, however, the geology of the Lower Coastal Plain is less complex than that of other sections of the state.

As previously mentioned, the area is dominated by fluvial deposits of unconsolidated sands and clays. Rocks are almost totally absent from the area, although Mills (1972 [1826]: 584) does note that some compact shell limestone was found on the Waccamaw between Gaul's Ferry and Bear Bluff.

Soils were primarily formed during the Pleistocene epoch and several terraces were deposited (Dudley 1986:85). The project vicinity is characterized by the Yauhannah-Ogeechee-Bladen Association. This association, typical of broad level areas, includes both moderately well drained and poorly drained soils. They generally have sands resting on clayey subsoils.

The survey area is dominated by Bladen Series soils. These are poorly drained soils that are found in low, flat, fluvial or marine terraces. The typical profile reveals a very dark gray (10YR3/1) fine sandy loam A horizon about 0.5 foot in depth. This overlies a gray (10YR5/1) clay to depths in excess of 3 feet. These soils have a seasonal water table within the upper foot of the profile. During the time of the survey many tests were moist, but standing water was not encountered. The wetland area to the west of the survey tract, while also classified as Bladen soil, revealed profiles more similar to the Meggett Series, with an A horizon of dark grayish brown (10YR4/2) loam about 0.3 foot in depth overlying a gray (10YR5/1) clay loam to at least 2 feet. The Meggett soils are frequently flooded. At the time of the survey there were areas of standing water and shovel tests revealed water within the upper 0.5 foot of tests (Dudley 1986).

In 1826 Robert Mills commented that soil was rich and productive adjacent to Horry's rivers. Even the uplands were well suited for cotton with their light sandy soil underlaid by clay. But he commented that a great deal of swamp land was found in the district, "fit only for cattle ranges" (Mills 1972 [1826]: 585). Edmund Ruffin, who managed to visit much of South Carolina's

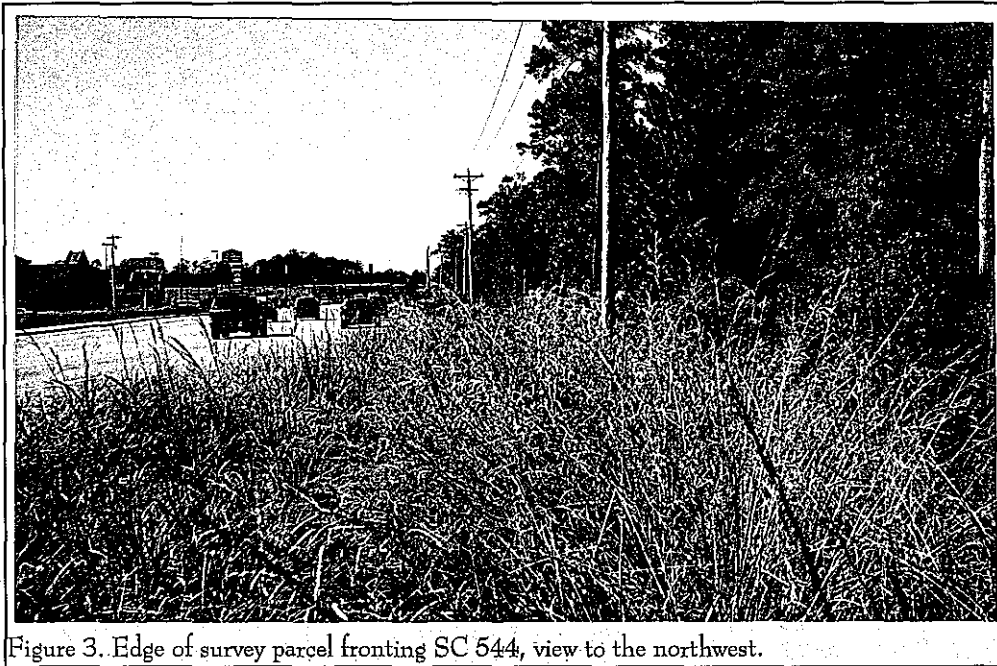


Figure 3. Edge of survey parcel fronting SC 544, view to the northwest.

coast in the mid-1840s, never sought to go to Horry, commenting that:

I would have gone to Horry, which is called the "dark corner" of the state, but for having no expectation of finding anyone acquainted with or feeling interested in the objects of explorations (Mathew 1992:215).

Climate

Elevation, latitude, and distance from the coast work close together to affect the climate of South Carolina, although Horry is clearly dominated by its maritime location. Much of the weather is controlled by the proximity of the Gulf Stream, about 50 miles offshore. In addition, the more westerly mountains block or moderate many of the cold air masses that flow across the state from west to east. Even the very cold air masses which cross the mountains are warmed by compression before the descent on the Coast.

Consequently, the climate of Horry County is temperate. The winters are relatively mild with a mean temperature of 48°F and the summers are very warm

and humid, with a mean temperature of 79°F and average humidity of 60%. Rainfall in the amount of about 51 inches is good for a broad range of crops. About 31 inches (or 60% of the total) occurs during the growing season, with until relatively recently periods of drought not being particularly common. Of course, there have been statewide droughts, such as the one in

1845, but more often the threat to Horry crops was flooding. Major floods have occurred in 1855, 1924, 1928, 1959, 1961, and 1973, with the September 1928 flood the largest known, reaching a stage of 12.75 feet above mean sea level (U.S. Army Corps of Engineers 1973:9).

The average growing season is about 234 days, although early freezes in the fall and late frosts in the spring can reduce this period by as much as 30 or more days (Dudley 1986:97). Consequently, most cotton planting, for example, did not take place until early May, avoiding the possibility that a late frost would damage the young seedlings.

Floristics

Vegetation in Horry County is characterized in relation to the previously broad topographic patterns of poorly drained floodplains and lowlands, and the well drained uplands.

The vegetation in Horry County has been classified by Küchler (1964) as part of the Oak-Hickory-Pine forest, based on potential natural vegetation. This would consist of medium tall to tall



Figure 4. Vegetation on the interior of the tract, view to the northeast on Transect 5.

forests of broadleaf deciduous and needleleaf evergreen trees. More specifically, however, the floodplains are covered by mixed hardwoods, including bald cypress, tupelo gum, and black gum. Less water tolerant trees, such as pines, occur on the uplands or on better drained slopes. Also found in the bottomlands, floodplains, and Carolina bays are red maple, ash, water oak, elm, and sweet gum. On the better drained uplands pine dominates, with loblolly and longleaf pines being indigenous and the slash pine introduced.

In 1826 Mills in describing the Horry District vegetation, noted:

The long leaf pine abounds, also the cypress, live oak, water oak, white oak, &c. The fruit trees are, peaches, apples, pears, plums, cherries, figs; besides strawberries, which grow wild, whortleberries, &c. The forest trees begin to bud in the latter part of March, and the fruit trees in April. The pine and cypress are mostly used for buildings (Mills 1972 [1826]: 582).

The poorly drained swamps and flatwoods of Horry County were not particularly attractive to early settlers and much of the area was not actively farmed for a number of years.

The project area includes a diverse mix of second growth forests. Along the edge of the road there is a mixed pine and hardwood second growth forest (Figure 3). The interior of the parcel, however,

tended to be dominated by hardwoods with an understory of more mesic species (Figure 4).

Prehistoric and Historic Synthesis

The Prehistoric

The Paleo-Indian period, lasting from 12,000 to 8,000 B.C., is evidenced by basally thinned, side-notched projectile points; fluted, lanceolate projectile points, side scrapers, end scrapers; and drills (Coe 1964; Michie 1977; Williams 1968). The Paleo-Indian occupation, while widespread, does not appear to have been intensive. Artifacts are most frequently found along major river drainages, which Michie interprets to support the concept of an economy "oriented towards the exploitation of now extinct mega-fauna" (Michie 1977:124).

Unfortunately, little is known about Paleo-Indian subsistence strategies, settlement systems, or social organization. Generally, archaeologists agree that the Paleo-Indian groups were at a band level of society (see Service 1966), were nomadic, and were both hunters and foragers. While population density, based

INTRODUCTION

on the isolated finds, is thought to have been low, Walthall suggests that toward the end of the period, "there was an increase in population density and in territoriality and that a number of new resource areas were beginning to be exploited" (Walthall 1980:30).

The Archaic period, which dates from 8000 to 2000 B.C., does not form a sharp break with the Paleo-Indian period, but is a slow transition characterized by a modern climate and an increase in the diversity of material culture. Associated with this is a reliance on a broad spectrum of small mammals, although the white tailed deer was likely the most commonly exploited mammal. The chronology established by Coe (1964) for the North Carolina Piedmont may be applied with little modification to the South Carolina coastal plain and piedmont. Archaic period assemblages, exemplified by corner-notched and broad-stem projectile points, are fairly common, perhaps because the swamps and drainages offered especially attractive ecotones.

In the Coastal Plain of the South Carolina there is an increase in the quantity of Early Archaic remains, probably associated with an increase in population and associated increase in the intensity of occupation. While Hardaway and Dalton points are typically found as isolated specimens along riverine environments, remains from the following Palmer phase are not only more common, but are also found in both riverine and interriverine settings. Kirks are likewise common in the coastal plain (Goodyear et al. 1979).

The two primary Middle Archaic phases found in the coastal plain are the Morrow Mountain and Guilford (the Stanly and Halifax complexes identified by Coe are rarely encountered). Our best information on the Middle Woodland comes from sites investigated west of the Appalachian Mountains, such as the work in the Little Tennessee River Valley. The work at Middle Archaic river valley sites, with their evidence of a diverse floral and faunal subsistence base, seems to stand in stark contrast to Caldwell's Middle Archaic "Old Quartz Industry" of Georgia and South Carolina, where axes, choppers, and ground and polished stone tools are very rare.

The Late Archaic is characterized by the

appearance of large, square stemmed Savannah River projectile points (Coe 1964). These people continued the intensive exploitation of the uplands much like earlier Archaic groups. The bulk of our data for this period, however, comes from work in the Uwharrie region of North Carolina.

The Woodland period begins by definition with the introduction of fired clay pottery about 2000 B.C. along the South Carolina coast (the introduction of pottery, and hence the beginning of the Woodland period, occurs much later in the Piedmont of South Carolina). It should be noted that many researchers call the period from about 2500 to 1000 B.C. the Late Archaic because of a perceived continuation of the Archaic lifestyle in spite of the manufacture of pottery. Regardless of terminology, the period from 2500 to 1000 B.C. is well documented on the South Carolina coast and is characterized by Stallings (fiber-tempered) pottery (see Figure 5 for a synopsis of Woodland phases and pottery designations). The subsistence economy during this early period was based primarily on deer hunting and fishing, with supplemental inclusions of small mammals, birds, reptiles, and shellfish.

Like the Stallings settlement pattern, Thom's Creek sites are found in a variety of environmental zones and take on several forms. Thom's Creek sites are found throughout the South Carolina Coastal Zone, Coastal Plain, and up to the Fall Line. The sites are found into the North Carolina Coastal Plain, but do not appear to extend southward into Georgia.

In the Coastal Plain drainage of the Savannah River there is a change of settlement, and probably subsistence, away from the riverine focus found in the Stallings Phase (Hanson 1982:13; Stoltman 1974:235-236). Thom's Creek sites are more commonly found in the upland areas and lack evidence of intensive shellfish collection. In the Coastal Zone large, irregular shell middens, small, sparse shell middens; and large "shell rings" are found in the Thom's Creek settlement system.

The Deptford phase, which dates from 1100 B.C. to A.D. 600, is best characterized by fine to coarse sandy paste pottery with a check stamped surface treatment. The Deptford settlement pattern involves

ARCHAEOLOGICAL SURVEY OF THE JFLP TRACT

Dates	Period	Sub-Period	Regional Phases		
			COASTAL	MIDDLE SAVANNAH VALLEY	CENTRAL CAROLINA PIEDMONT
1715	HIST.	EARLY	Altamaha		Caraway
1650	MISS.	LATE	Irene / Pee Dee	Rembert	
1100		EARLY	Savannah	Hollywood	Dan River
				Lawton	Pee Dee
		LATE	St. Catherines / Swift Creek	Savannah	
800					Uwharrie
A.D.			Wilmington	Sand Tempered Wilmington?	
B.C.		MIDDLE	Deptford	Deptford	Yadkin
300	WOODLAND				
		EARLY	Refuge		Badin
1000					
2000		LATE	Thom's Creek Stallings		
3000			Savannah River Halifax		
5000	ARCHAIC	MIDDLE	Guilford Morrow Mountain Starly		
8000		EARLY	Kirk		
			Palmer		
10,000			Hardaway		
	PALEOINDIAN		Hardaway - Dalton		
12,000			Cumberland	Clovis	Simpson

Figure 5. Cultural periods along the coast of South Carolina.

both coastal and inland sites.

Inland, sites such as 38AK228-W, 38LX5, 38RD60, and 38BM40 indicate the presence of an extensive Deptford occupation on the Fall Line and the Coastal Plain, although sandy, acidic soils preclude statements on the subsistence base (Anderson 1979; Ryan 1972; Trinkley 1980). These interior or upland Deptford sites, however, are strongly associated with the swamp terrace edge, and this environment is productive not only in nut masts, but also in large mammals such as deer. Perhaps the best data concerning Deptford "base camps" comes from the Lewis-West site (38AK228-W), where evidence of abundant food remains, storage pit features, elaborate material culture, mortuary behavior, and craft specialization has been reported (Sassaman et al. 1990:96-98).

Throughout much of the Coastal Zone and Coastal Plain north of Charleston, a somewhat different cultural manifestation is observed, related to the "Northern Tradition" (e.g., Caldwell 1958). This recently identified assemblage has been termed Deep Creek and was first identified from northern North Carolina sites (Phelps 1983). The Deep Creek assemblage is characterized by pottery with medium to coarse sand inclusions and surface treatments of cord marking, fabric impressing, simple stamping, and net impressing. Much of this material has been previously designated as the Middle Woodland "Cape Fear" pottery originally typed by South (1976). The Deep Creek wares date from about 1000 B.C. to A.D. 1 in North Carolina, but may date later in South Carolina. The Deep Creek settlement and subsistence systems are poorly known, but appear to be very similar to those identified with the Deptford phase.

The Deep Creek assemblage strongly resembles Deptford both typologically and temporally. It appears this northern tradition of cord and fabric impressions was introduced and gradually accepted by indigenous South Carolina populations. During this time some groups continued making only the older carved paddle-stamped pottery, while others mixed the two styles, and still others (and later all) made exclusively cord and fabric stamped wares.

The Middle Woodland in South Carolina is

characterized by a pattern of settlement mobility and short-term occupation. On the southern coast it is associated with the Wilmington phase, while on the northern coast it is recognized by the presence of Hanover, McClellanville or Santee, and Mount Pleasant assemblages. The best data concerning Middle Woodland Coastal Zone assemblages comes from Phelps' (1983:32-33) work in North Carolina. Associated items include a small variety of the Roanoke Large Triangular points (Coe 1964:110-111), sandstone abraders, shell pendants, polished stone gorgets, celts, and woven marsh mats. Significantly, both primary inhumations and cremations are found.

On the Coastal Plain of South Carolina, researchers are finding evidence of a Middle Woodland Yadkin assemblage, best known from Coe's work at the Doerschuk site in North Carolina (Coe 1964:25-26). Yadkin pottery is characterized by a crushed quartz temper and cord marked, fabric impressed, and linear check stamped surface treatments. The Yadkin ceramics are associated with medium-sized triangular points, although Oliver (1981) suggests that a continuation of the Piedmont Stemmed Tradition to at least A.D. 300 coexisted with this Triangular Tradition. The Yadkin series in South Carolina was first observed by Ward (1978, 1983) from the White's Creek drainage in Marlboro County, South Carolina. Since then, a large Yadkin village has been identified by DePratter at the Dunlap site (38DA66) in Darlington County, South Carolina (Chester DePratter, personal communication 1985) and Blanton et al. (1986) have excavated a small Yadkin site (38SU83) in Sumter County, South Carolina. Research at 38FL249 on the Roche Carolina tract in northern Florence County revealed an assemblage including Badin, Yadkin, and Wilmington wares (Trinkley et al. 1993:85-102). Anderson et al. (1982:299-302) offer additional typological assessments of the Yadkin wares in South Carolina.

Over the years the suggestion that Cape Fear might be replaced by such types as Deep Creek and Mount Pleasant has raised considerable controversy. Taylor, for example, rejects the use of the North Carolina types in favor of those developed by Anderson et al. (1982) from their work at Mattassee Lake in Berkeley County (Taylor 1984:80). Cable (1991) is even less generous in his denouncement of ceramic

constructs developed nearly a decade ago, also favoring adoption of the Mattassee Lake typology and chronology. This construct, recognizing five phases (Deptford I - III, McClellanville, and Santee I), uses a type variety system.

Regardless of terminology, these Middle Woodland Coastal Plain and Coastal Zone phases continue the Early Woodland Deptford pattern of mobility. While sites are found all along the coast and inland to the Fall Line, shell midden sites evidence sparse shell and artifacts. Gone are the abundant shell tools, worked bone items, and clay balls. Recent investigations at Coastal Zone sites such as 38BU747 and 38BU1214, however, have provided some evidence of worked bone and shell items at Deptford phase middens (see Trinkley 1990).

In many respects the South Carolina Late Woodland may be characterized as a continuation of previous Middle Woodland cultural assemblages. While outside the Carolinas there were major cultural changes, such as the continued development and elaboration of agriculture, the Carolina groups settled into a lifeway not appreciably different from that observed for the previous 500 to 700 years (cf. Sassaman et al. 1990:14-15). This situation would remain unchanged until the development of the South Appalachian Mississippian complex (see Ferguson 1971).

The South Appalachian Mississippian Period (ca. A.D. 1100 to 1640) is the most elaborate level of culture attained by the native inhabitants and is followed by cultural disintegration brought about largely by European disease. The period is characterized by complicated stamped pottery, complex social organization, agriculture, and the construction of temple mounds and ceremonial centers. The earliest phases include the Savannah and Pee Dee (A.D. 1200 to 1550).

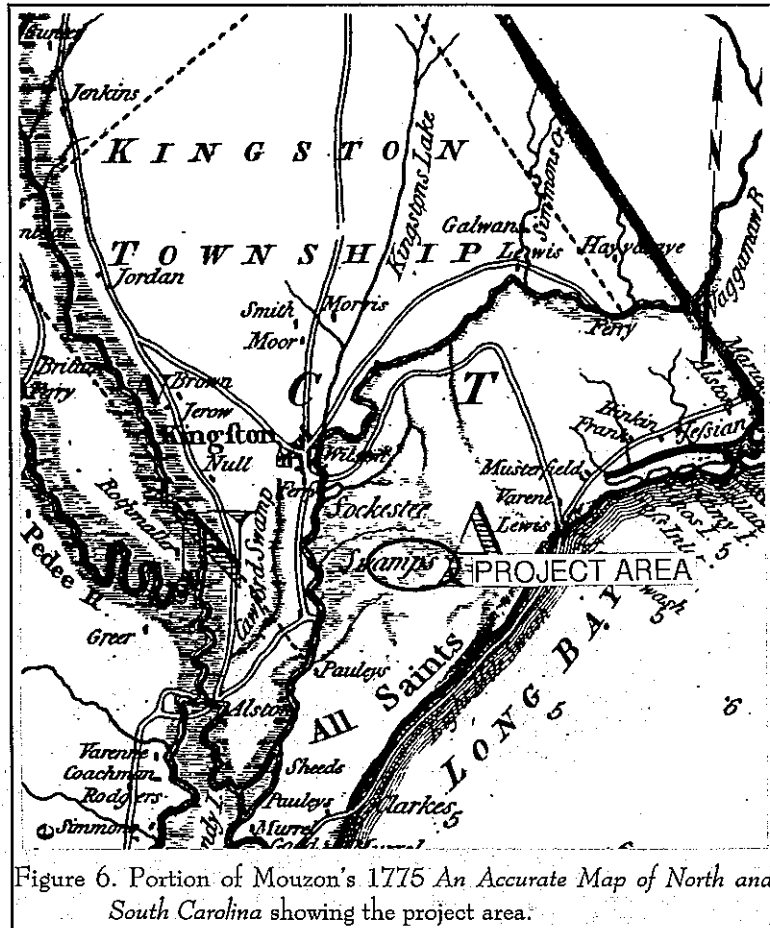


Figure 6. Portion of Mouzon's 1775 *An Accurate Map of North and South Carolina* showing the project area.

Historic Overview

The earliest activity in the Horry County area may have been the Spanish Ayllon movement from Rio Jordon (Cape Fear River) to San Miguel de Gualdape, 45 leagues distant. Some have argued that Fort San Miguel may have been at the mouth of Winyah Bay, although Paul Hoffman has recently suggested the fort was in Beaufort County, South Carolina or Chatham County, Georgia.

While the English settled Charleston in 1670, the northern frontier was ignored, except for Indian trade, until 1731, when the first Royal Governor of Carolina, Robert Johnson, directed 11 townships to be laid out, including Kingston on the west bank of the Waccamaw. Kingston covered much of Georgetown and Horry counties and by 1734 the town of Kingston, later

known as Conwayboro and eventually Conway, was founded. The township, however, was never erected into a parish, but remained part of the Parish of Prince George, Winyah until 1785. In that year Prince George was divided into four districts and by 1801 Horry District was formally separated from Georgetown (Rogers 1972:9). The designation of "county" was not used until 1868. A variety of townships were established, including Simpson Creek and Little River on the south side of the Waccamaw River.

Mouzon's 1775 map of the region fails to reveal any substantial settlement in the survey area. The focus was toward the far more profitable rice lands to the south, on the Waccamaw Neck. In fact, the project area is shown entirely as swamp and the region was called "Sockestee Swamps," suggesting that it was not viewed as habitable (Figure 6).

Prior to the Revolution there were few residents in Kingston and it was not until the late eighteenth century that English, French, Scotch, and Irish settlers began coming into the area. Many settlers in the early nineteenth century came from North Carolina and the northern seaboard states.

In spite of Horry's coastal plain situation, the area developed along vastly different lines than its southern neighbors Georgetown and Charleston. Horry District was always isolated from the remainder of South Carolina and had much stronger connections with North Carolina (Rogers 1972:3). The major traffic artery was the Waccamaw River and this reliance on river transport did not change until the highway development of the 1930s. Subsistence farming was the main occupation in the early 1800s and the farms were small, specializing in peas, wheat, rice, cotton, and corn, most for home consumption (Rogers 1972:5). Mills notes that the population was

mostly engaged in cultivating the soil. There are a few mechanics, such

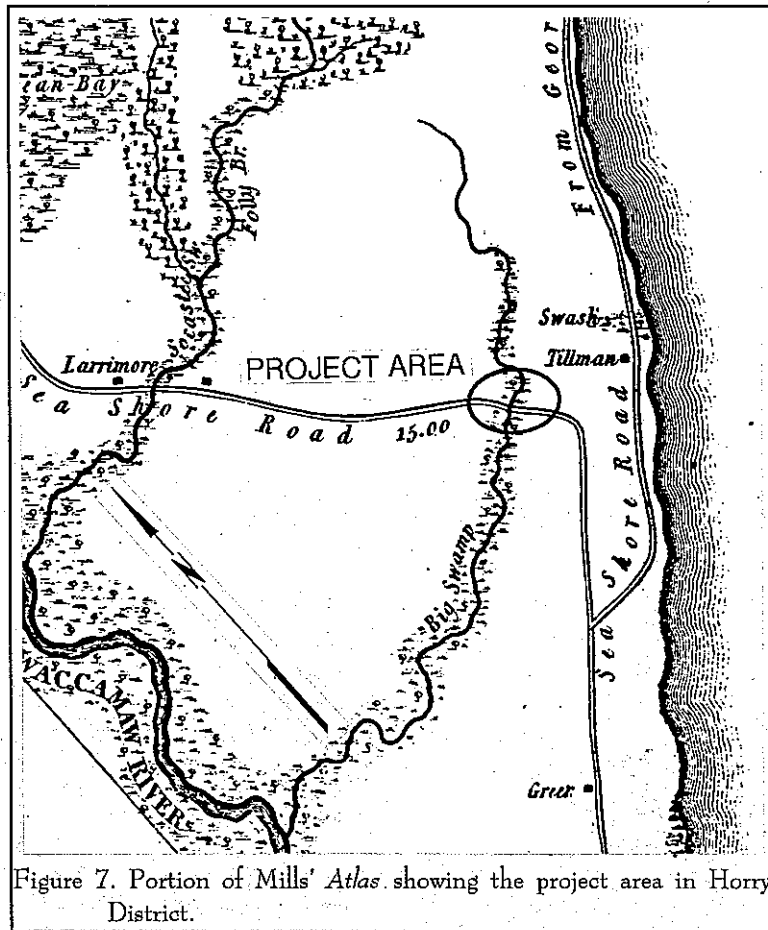


Figure 7. Portion of Mills' *Atlas* showing the project area in Horry District.

as blacksmiths, shoemakers, taylors [sic], halters, etc. (Mills 1972 [1826]:583).

For Mills' *Atlas* of 1826, the Horry District was surveyed by Harlee in 1820. At that time the swamps we see in the area today were viewed as a flowing route, called "Big Swamp." What is today SC 544 was then the road "from Pitch Landing Ferry to Sea Shore Road." Although Tillman's Arc Plantation is shown to the east, on the Shore Road, the survey tract area is shown vacant (Figure 7). This absence of houses may not so much indicate sparse settlement as it may reflect the subscription basis of Mills' *Atlas*. The subsistence farmers of Horry District may either have been unable to subscribe or may have had no need to let others know their location. The 1860 census for Horry District indicates that many of the farmers in Kingston, for

example, could neither read nor write, further reducing the benefits of listing in an atlas.

The emphasis on subsistence farming appears to be the result of topography. Only 20% of the land is subject to the type of tidal overflow necessary for wet cultivation of rice. Mills (1972 [1826]:581) notes that the river floodplain soil was productive where it could be reclaimed by drainage, while the upland soils were much less productive. This difference in quality is reflected in the prices for the land. Mills states that,

the low land swamps, when secured from the freshets, will sell for 40 or \$50 an acre. The uplands are valued at from \$4 down to 25 cents per acre (Mills 1972 [1826]:581).

Interestingly, the price of "improved farms" ranged from \$20 to \$50 an acre as late as 1918 (Tillman et al. 1919:340). The few plantations found in Horry District were primarily located in All Saints Parish, east and south of the Waccamaw River. It was from this area that a small quantity of rice was exported throughout the nineteenth century (Rogers 1972:13).

Because the soils of Horry District were not able to support plantation agriculture a unique distribution of population and a very low percentage of slaves were found in the region. Horry County also continued to play a minor role in state politics. The area, prior to the Civil War, was oriented to smaller farmers and never developed an aristocratic plantation society with political and economic powers. Most of the farms, including the larger ones, were situated in Kingston Township. The 1860 census indicates that of the 782 farms, 560 were in Kingston (Rogers 1972:12). In 1860, the population was 2606 and there were only 708 slaves. This ratio of 70% white and 30% blacks has not only remained stable into the twentieth century, but also stands in contrast to Georgetown District where about 12% of the population was white and 88% was black until the 1880 census, when the white population increased to about 20% (Rogers 1972).

Horry District never sided with the radical secessionists, possibly because of the influence of

northern immigrants or because of the resentment of the political and economic power of slave owners. In any event, Horry County responded enthusiastically to the call for volunteers at the outbreak of the Civil War (Rogers 1972:35).

By the 1830s a new industry was competing with farming in the Horry area. Northern immigrants from Maine, coupled with "pine woods speculators" from North Carolina began to exploit the forest products of both the uplands and swamp areas (Tillman et al. 1919:330; Berry 1970; Rogers 1972:14). The Horry District was the leading turpentine producer in South Carolina by 1860, producing products valued at \$392,643. The lumber and turpentine industry continued to grow rapidly after the Civil War. Tobacco was introduced about 1850, but was not an important crop until after the Civil War, lead by the Green Sea Township.

Horry District saw little involvement in the Civil War, although 925 of the 1,000 men in the voting population volunteered for duty and served (Rogers 1972:35). Fort Randell was established at Clardy's Point on the Little River and saw skirmishes in 1863 and 1865. The salt works of Peter Vaught, Sr. at Singleton Swash were raided in April 1864, and in 1865 a Union expedition was led up the Waccamaw to destroy ferries at Bull Creek and Yahannah (Rogers 1972:35-38).

After the Civil War, Horry was part of the Military District of Eastern South Carolina, but the Federal stay was short and by 1866 military troops had left Horry County. This absence of Federal troops continued throughout Reconstruction and the Democrats maintained political control throughout the period. Further, there was no land distribution in Horry County, possibly because there was really no land worth distributing (Rogers 1972:47). Following the Civil War a number of changes began to affect the Horry area. Tobacco began to be a more important crop, the first county bank was organized in 1880, the railroad and telegraph arrived in 1887, and in 1869 a regular weekly county newspaper appeared (the *Horry Weekly News*, which published until 1877). Conwayboro was changed to Conway in 1883 and the only other "major" town continued to be Little River.

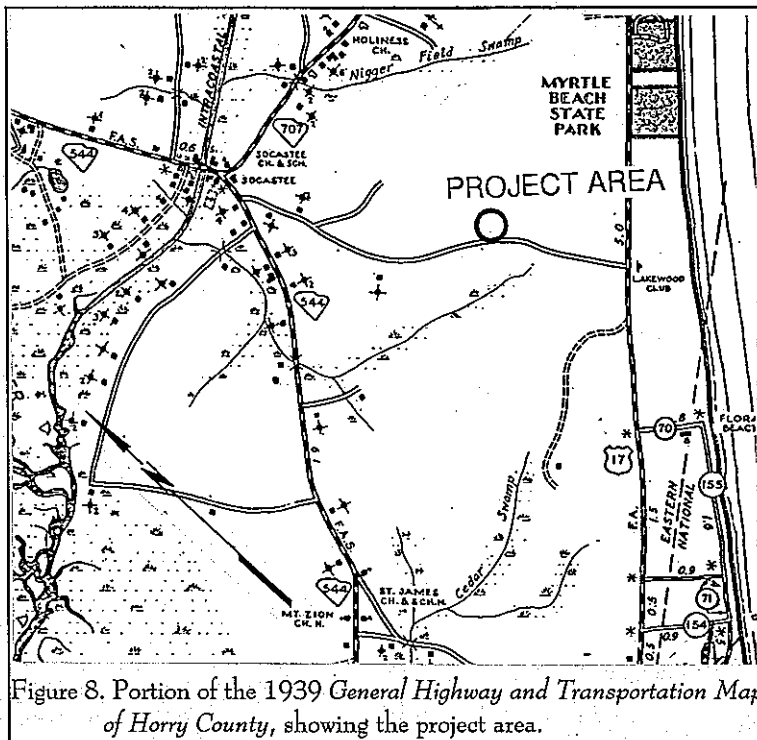


Figure 8. Portion of the 1939 General Highway and Transportation Map of Horry County, showing the project area.

The turpentine business boomed in the 1870s and by 1880 there were 21 operators in the county, producing \$181,400 annually (Rogers 1972:50). Farming, however, continued to be important. In 1870 there were 1,300 farms averaging 50 acres in size. The major crops were still subsistence items such as corn, sweet potatoes, and rice. Few wage employees were found in Horry (Rogers 1972:58). The Socastee and Little River townships had the richest farms and the five largest farms also produced turpentine in 1870 (Rogers 1972:60). The Grange movement arrived in Horry County relatively late, never organized in many areas, and failed by the late 1870s.

By 1910 the County population had increased to almost 27,000 but there was no town, including Conway, with a population of at least 2,500. Conway continued, however, to have strong lumbering and mercantile interests. With the gradual decline of lumbering and the turpentine industry, farming was once again the dominant activity in the county. The period from 1880 to 1910 saw corn acreage increase 140%, cotton acreage increase 90%, and tobacco acreage increase from 19 to 5,347 acres. During the

same time rice production fell from 747,689 to 1,210 pounds (Tillman et al. 1919:333). By 1919 the chief money crops were corn, cotton, and tobacco, although corn was largely used to supply the home and fatten stock. After 1895 tobacco began to replace cotton as a prime money crop and by 1910 was "grown more or less generally over a county by small farmers who live on their farms and superintend the work (Tillman et al. 1919:335).

In the early twentieth century hogs were the principle source of livestock income. These animals were usually slaughtered in the fall for home use or sale on the local market. Cattle were mostly scrub stock and dairying was neglected. Farm equipment was largely inadequate in the early 1900s and most of the plowing was done with one ox or mule. On many small farms the adequacy of farm equipment did not appreciably improve into the 1940s, when the probate inventory for

one small Horry farmer listed only one mule, a one-horse wagon, one disc, four plows, one lot hoes, one guano distributor, a tobacco sprayer, and a corn planter (Trinkley and Caballero 1983:8). Tillman et al. (1919:338) indicate that in the early 1900s plowing was seldom more than 2 to 3 inches deep because of the poor machinery. It is suggested that this lack of equipment was not entirely related to a lack of prosperity, but rather was largely the result of cheap labor. Tillman et al. report that, "negro men receive 75 cents to \$1.25 a day . . . , while negro women are paid 50 to 65 cents a day" (Tillman et al. 1919:340).

Horry County, in 1910, had a relatively low rate of farm tenancy. The 1937 *General Highway and Transportation Map of Horry County* shows no tenant houses in the immediate project area (Figure 8). In fact, the near absence of settlement in the region suggests that it was still seen as undesirable swamp land. Tillman et al. (1919:340) indicate that 72.9% of the farms were operated by owners and 27% by tenants. The average size of such farms (each tenancy is classified as a farm) was 117.8 acres. This is contrasted with piedmont Spartanburg, where in 1920 32.1% of the

farms were operated by their owners and 67.7% were operated by tenants. In Spartanburg, where cotton was still king, the average farm size was 49.4 acres (Latimer et al. 1924:419). This dichotomy documents the differences between tenancy in the Atlantic Coastal Plain, where there was a low "devotion" to cotton, and in the Black Belt and Upper Piedmont, where cotton was more important, tenancy rates higher, and farm size smaller (see Woofter et al. 1936).

Lewis (1998) briefly recounts the development of many of Horry County's beaches. Nearby Surfside Beach was originally part of the 3,200 acre Tillman tract known as the Ark Plantation. After the Civil War, and the death of Tillman, the plantation was broken into a number of smaller tracts. A portion on the Ocean was acquired by the Roach family and it became known as Roach's Beach. When the property was acquired by George Holliday of Gallivants Ferry, the area was renamed Floral Beach for his wife, Flora. That name is shown on the 1939 highway map (Figure 8). The property eventually left Holliday's hands and one of the first developers of the area, the Caldwell Company of Columbia, ended in bankruptcy when they were unable to find sellers willing to acquire lots for \$35. Surfside wasn't developed until the mid-1950s, when the property was acquired by James Calhoun and Collins Spivey. The Town of Surfside Beach was incorporated in 1964 (Lewis 1998:82-83).

Previous Archaeological Studies

Horry has received rather spotty archaeological attention. Derting and his colleagues, for example, list 67 reports associated with the county, with 41 of these (or 61%) representing highway or sewer surveys (Derting et al. 1991). Although dated, this indicates that the attention has been focused on relatively narrow, constrained corridors, with only minor attention devoted to the area's rich prehistoric and protohistoric resources.

Considerable, primarily unpublished, research took place in the Myrtle Beach area during the 1960s at the Ellsworth Site by Erika Fogg-Amed, then a student of Reinhold Englemyer at USC-Conway. Several test units were placed within the site which yielded Stallings, Thom's Creek, Hanover, and Cape Fear sherds, as well as a Morrow Mountain component

(Fogg-Amed n.d. a). No site boundaries were established and, in fact, no site form has ever been filed.

Fogg-Amed also tested the "Coates Site," located about 10 miles north of Myrtle Beach on a high bluff overlooking a freshwater pond. Testing at this site yielded a dense shell midden that produced only lithic debitage (Fogg-Amed n.d. b). Again, no site form was ever completed and the report is available only as a draft.

This unfortunately is characteristic of much of the early work in this part of South Carolina, which even into the late twentieth century held its representation as being "the dark corner."

The background review identified four previously recorded sites in the 1-mile APE. Two of these sites, 38HR44 and 38HR45 were the result of Englemyer's survey in the area. More recently they have been identified as probable road fill. Two additional sites in the APE, 38HR223 and 38HR227, were both encountered during the construction of a nearby golf course. While at least seemed to exhibit a wide range of prehistoric material, it does not appear that any data recovery was ever conducted.

In addition, there was a very large tract of about 525 acres recently surveyed to the northeast, partially within the APE. No archaeological sites were found in the entire tract (Reid 1999).

This background work, beyond documenting the rather unconventional archaeological efforts which took place in this part of South Carolina during the third quarter of the twentieth century, also suggest that the project is not situated in an area likely to produce many archaeological sites.

METHODS AND RESULTS

Background Investigations

Prior to conducting this investigation we searched the State Historic Preservation Office GIS for any information on National Register buildings, districts, structures, sites, or objects in the study area, as well as the results of any structure surveys which may have been completed in the project areas. We found no identified National Register properties within a mile of the proposed project. Horry County had an architectural survey conducted in 1988, with a subsequent follow-up in 1990. The results of these surveys are also included on the GIS, but no properties were identified within the 1-mile APE.

We also contacted the S.C. Institute for Archaeology and Anthropology for information concerning any previously recorded archaeological sites in the immediate survey area. As previously discussed, there are four sites in the APE, but none within the immediate project area.

Field Methods

The initially proposed field techniques involved the placement of shovel tests at 100 foot intervals along transects, which were laid out at 100-foot intervals running magnetic north from the SC 544 property line (Figure 9). In areas of standing water or wetlands no shovel tests would be excavated. For all shovel tests, the soil would be screened through ¼ inch mesh, with each test numbered sequentially along numbered transects. Each test would measure about 1 foot square and would normally be taken to a depth of at least 1.5 feet. All cultural remains would be collected, except for shell, mortar, and brick, which would be quantitatively noted in the field and discarded. Notes would be maintained for profiles at any sites encountered.

Should sites (defined by the presence of two or more artifacts from either surface survey or shovel tests within a 25 feet area) be identified by shovel testing,

further tests would be used to obtain data on site boundaries, artifact quantity and diversity, site integrity, and temporal affiliation. These tests would be placed at 50 feet intervals in a simple cruciform pattern until negative shovel tests were encountered. The information required for completion of South Carolina Institute of Archaeology and Anthropology site forms would be collected and photographs would be taken, if warranted in the opinion of the field investigators.

This strategy was implemented with no significant modifications. Although the property lines were not marked, we used available mapping to scale off the number of shovel tests which should be excavated within the property boundaries. We did find that the access area for the site was very wet during the time of the survey with areas of standing water. As a result, no formal shovel tests were excavated in this area, although a pedestrian survey was conducted, with periodic shovel tests to verify the wet soil conditions. As previously noted, water was encountered within the upper 0.5 foot of the shovel tests.

A series of seven transects were established running magnetic north from SC 544. A total of 24 shovel tests were excavated on the tract. The shovel tests confirmed the presence of Bladen soils in the area proposed for the restaurant, with more poorly drained (probably Meggett) soils to the west in the access area. Most of the shovel tests revealed an upper horizon of very dark gray (10YR3/1) loam about 0.5 foot in depth overlying a gray (10YR5/1) clay. Soil reduction was found throughout the tract. As the soils got lower and more moist, we began seeing dark grayish-brown (10YR4/2) loam about 0.2 to 0.4 foot in depth overlying a gray (10YR5/1) clay loam. Organic material was common in these soils.

Although Horry County has received a comprehensive survey, we drove the accessible public roads within a 1 mile APE looking for any structures which might be 50 years old and which retained

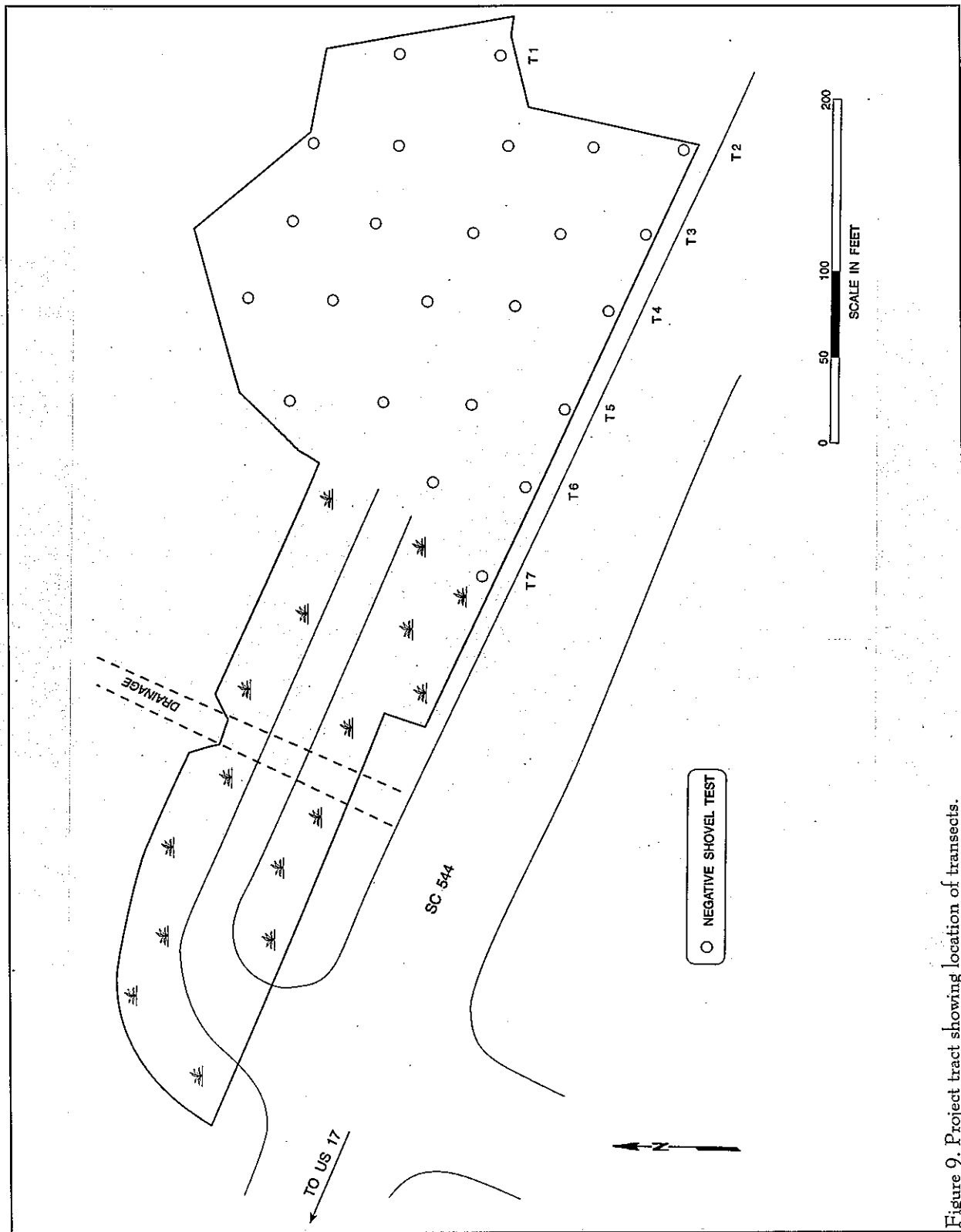


Figure 9. Project tract showing location of transects.

integrity. None were identified. There were also no previously identified structures in the project APE.

Site Evaluation

Identified sites would be evaluated for further work based on the eligibility criteria for the National Register of Historic Places. Chicora Foundation only provides an opinion of National Register eligibility and the final determination is made by the lead federal agency in consultation with the State Historic Preservation Officer at the South Carolina Department of Archives and History.

The criteria for eligibility to the National Register of Historic Places is described by 36CFR60.4, which states:

the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and

a. that are associated with events that have made a significant contribution to the broad patterns of our history; or

b. that are associated with the lives of persons significant in our past; or

c. that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

d. that have yielded, or may be

likely to yield, information important in prehistory or history.

National Register Bulletin 36 (Townsend et al. 1993) provides an evaluative process that contains five steps for forming a clearly defined explicit rationale for either the site's eligibility or lack of eligibility. Briefly, these steps are:

- identification of the site's data sets or categories of archaeological information such as ceramics, lithics, subsistence remains, architectural remains, or sub-surface features;

- identification of the historic context applicable to the site, providing a framework for the evaluative process;

- identification of the important research questions the site might be able to address, given the data sets and the context;

- evaluation of the site's archaeological integrity to ensure that the data sets were sufficiently well preserved to address the research questions; and

- identification of important research questions among all of those which might be asked and answered at the site.

This approach, of course, has been developed for use documenting eligibility of sites being actually nominated to the National Register of Historic Places where the evaluative process must stand alone, with relatively little reference to other documentation and where typically only one site is being considered.

For architectural sites the evaluative process would be somewhat different. Given the relatively limited architectural data available for most of the properties, we would evaluate these sites primarily using National Register Criterion C, focusing on the site's "distinctive

characteristics." Key to this concept is the issue of integrity. This means that the property needs to have retained, essentially intact, its physical identity from the historic period.

Particular attention would be given to the integrity of design, workmanship, and materials. Design includes the organization of space, proportion, scale, technology, ornamentation, and materials. As *National Register Bulletin* 36 observes, "Recognizability of a property, or the ability of a property to convey its significance, depends largely upon the degree to which the design of the property is intact" (Townsend et al. 1993:18). Workmanship is evidence of the artisan's labor and skill and can apply to either the entire property or to specific features of the property. Finally, materials — the physical items used on and in the property — are "of paramount importance under Criterion C" (Townsend et al. 1993:19). Integrity here is reflected by maintenance of the original material and avoidance of replacement materials.

Survey Results

No archaeological remains were identified in any of the shovel tests. No additional management activities for the project are recommended, pending concurrence by the State Historic Preservation Office.

The architectural survey failed to identify any structures not recorded by the previous studies. Most of the structures in the project APE appear to post-date about 1980. The few which may date to the mid-twentieth century appear to exhibit extensive alterations — reworking of porches, installation of synthetic siding, modifications of foundations, and general modifications likely caused by recent hurricane and flooding damage. In other words, regardless of age, most of the structures had significant loss of integrity.

SUMMARY AND RECOMMENDATIONS

This study involved the examination of the 2 acre JFLP on the northeast side of SC 544 in Horry County, South Carolina, about 1,500 feet southeast of the US 17 interchange. This work was conducted to assist The Brigman Company help their clients comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

Examination of files at the S.C. Department of Archives and History revealed that a comprehensive historic and architectural survey of the project area had been conducted in 1988, with subsequent work in 1990. No structures were identified within a 1-mile APE surrounding the project tract. Likewise, no National Register properties were identified in the immediate area. The files at the S.C. Institute of Archaeology and Anthropology were also searched; no previously identified archaeological sites were found in the immediate project area, although four were reported for the APE.

The tract was shovel tested at 100 foot intervals with tests routinely excavated to 1.5 feet and some taken to 2 feet or deeper. Virtually all of the tract was found to consist of poorly drained sand loams overlying clays. In the access route we found areas of standing water, or soils which were wet when excavated. As a result, a pedestrian survey was conducted in this area with only occasional shovel tests to verify soil conditions. No archaeological remains were encountered on the tract and no additional management activities are recommended, pending the review and concurrence of the State Historic Preservation Office and the lead federal agency.

In addition, the public roads within a 1-mile APE were driven to verify that there were no architectural sites retaining integrity which might have been missed by previous survey efforts. None were identified.

It is always possible that archaeological remains

may be encountered in the project area during construction activities. As always, contractors should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office, or Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No further land altering activities should take place in the vicinity of these discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

SOURCES CITED

- Anderson, David G.
1979 *Excavations at Four Fall Line Sites: The Southeastern Beltway Project.* Commonwealth Associates, Inc., Jacksonville, Michigan. Submitted to the South Carolina Department of Highways and Public Transportation, Columbia.
- Anderson, David G., Charles E. Cantley, and A. Lee Novick
1982 *The Mattassee Lake Sites: Archaeological Investigations Along the Lower Santee River in the Coastal Plain of South Carolina.* Commonwealth Associates, Inc., Jackson, Michigan.
- Berry, C.B.
1970 *The Colonial Period. Independent Republic Quarterly* 9(1):13-15.
- Blanton, Dennis B., Christopher T. Espenshade, and Paul E. Brockington, Jr.
1986 *An Archaeological Study of 38SU83: A Yadkin Phase Site in the Upper Coastal Plain of South Carolina.* Garrow and Associates, Inc., Atlanta.
- Brown, Paul J.
1975 *Coastal Morphology of South Carolina.* Unpublished M.S. Thesis, Department of Geology, University of South Carolina, Columbia.
- Cable, John
1991 *Archaeological Test Excavations on the Northeastern Perimeter of the Buck Hall Site (38CH044), Francis Marion National Forest, South Carolina.* New South Associates, Irmo, South Carolina.
- Caldwell, Joseph R.
1958 *Trend and Tradition in the Prehistory of the Eastern United States.* Memoir 88. American Anthropologist.
- Coe, Joffre
1964 *The Formative Cultures of the Carolina Piedmont.* Transactions of the American Philosophical Society 54(5).
- Cooke, C. Wythe
1936 *Geology of the Coastal Plain of South Carolina.* Bulletin 867. U.S. Geological Survey, Washington, D.C.
- Derting, Keith M., Sharon L. Pekrul, and Charles J. Rinehart
1991 *A Comprehensive Bibliography of South Carolina Archaeology.* Research Manuscript Series 211. S.C. Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
- Dudley, Travis A.
1986 *Soil Survey of Horry County, South Carolina.* U.S. Department of Agriculture, Soil Conservation Service, Washington, D.C.
- Ellerbe, Clarence M.
1974 *South Carolina Soils and Their Interpretations for Selected Uses.* S.C. Land Resources Commission, Columbia.
- Ferguson, Leland G.
1971 *South Appalachian Mississippian.*

- Ph.D. dissertation, University of North Carolina, Chapel Hill. University Microfilms, Ann Arbor, Michigan.
- Fogg-Amed, Erika
n.d. a Sites dug Summer of 1964 (and Fall, 1963), Summer of 1965. Field notes on file, S.C. Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
- n.d. b Notes on Archaeological Work Done on the Northeast Coast of South Carolina, 1963-1965. Field notes on file, S.C. Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
- Goodyear, Albert C., John H. House, and Neal W. Ackerly
1979 *Laurens-Anderson: An Archaeological Study of the Inter-Riverine Piedmont*. Anthropological Studies 4, Occasional Papers of the Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
- Hanson, Glen T., Jr.
1982 The Analysis of Late Archaic-Early Woodland Adaptive Change Along the Middle Savannah River: A Proposed Study. *South Carolina Institute of Archaeology and Anthropology Notebook* 14:1-38.
- Küchler, A.W.
1964 *Potential Natural Vegetation of the Conterminous United States*. Special Publication No. 36. American Geographical Society, New York.
- Latimer, W.J. and Cornelius Van Duyn
1910 Soil Survey of the Conway Area, South Carolina. *Field Operations of the Bureau of Soils* 1909:473-502.
- Lewis, Catherine H.
1998 *Horry County, South Carolina 1730-1993*. University of South Carolina Press, Columbia.
- Mathew, William M.
1992 *Agriculture, Geology, and Society in Antebellum South Carolina: The Private Diary of Edmund Ruffin, 1843*. University of Georgia Press, Athens.
- Michie, James L.
1977 *The Late Pleistocene Human Occupation of South Carolina*. Unpublished Honor's Thesis, Department of Anthropology, University of South Carolina, Columbia.
- Mills, Robert
1972 [1826] *Statistics of South Carolina*. Hurlbut and Lloyd, Charleston, South Carolina. 1972 facsimile ed. The Reprint Company, Spartanburg, South Carolina.
- Oliver, Billy L.
1981 *The Piedmont Tradition: Refinement of the Savannah River Stemmed Point Type*. Unpublished Master's Thesis, Department of Anthropology, University of North Carolina, Chapel Hill.
- Phelps, David S.
1983 Archaeology of the North Carolina Coast and Coastal Plain: Problems and Hypotheses. In *The Prehistory of North Carolina: An Archaeological Symposium*, edited by Mark A. Mathis and Jeffrey J. Crow, pp. 1-52. North Carolina Division of Archives and History, Department of Cultural Resources, Raleigh.
- Reid, D.
1999 *Cultural Resources Survey of the*

SOURCES CITED

- Clemson Tract, Horry County, South Carolina.* Brockington and Associates, Atlanta.
- Rogers, James S., III
1972 *The History of Horry County, South Carolina, 1850-1876.* Unpublished M.A. Thesis, Department of History, University of South Carolina, Columbia.
- Ryan, Thomas M.
1972 *Archaeological Survey of the Columbia Zoological Park, Richland and Lexington Counties, South Carolina.* Research Manuscript Series 37. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
- Sassaman, Kenneth E., Mark J. Brooks, Glen T. Hanson, and David G. Anderson
1990 *Native American Prehistory of the Middle Savannah River Valley.* Savannah River Archaeological Research Papers 1. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
- Service, Elman R.
1966 *The Hunters.* Prentice-Hall, Englewood Cliffs, New Jersey.
- Smith, Lynwood
1933 *Physiography of South Carolina.* Unpublished M.S. Thesis, Department of Geology, University of South Carolina, Columbia.
- South, Stanley A.
1976 *An Archaeological Survey of Southeastern North Carolina.* *South Carolina Institute of Archaeology and Anthropology Notebook* 93.
- Stoltman, James B.
1974 *Groton Plantation: An Archaeological Study of a South Carolina Locality.* Monographs of the Peabody Museum 1. Harvard University, Cambridge.
- Taylor, Richard L. (editor)
1984 *Cultural Resources Survey of the Proposed Pee Dee Electric Generating Facility in Florence County, South Carolina.* Commonwealth Associates, Jackson, Michigan.
- Tillman, B.W., W.E. McLendon, H.H. Krusehopf, A.C. Anderson, Cornelius Van Duyne, and W.J. Latimer
1919 *Soil Survey of Horry County, South Carolina. Field Operations of the Bureau of Soils* 1918:329-376.
- Townsend, Jan, John H. Sprinkle, Jr., and John Knoerl
1993 *Guidelines for Evaluating and Registering Historical Archaeological Sites and Districts.* National Register Bulletin 36. National Park Service, Washington, D.C.
- Trinkley, Michael
1980 *Additional Investigations at 38LX5.* South Carolina Department of Highways and Public Transportation, Columbia.
1990 *An Archaeological Context for the South Carolina Woodland Period.* Research Series 22. Chicora Foundation, Inc., Columbia.
- Trinkley, Michael, Debi Hacker, and Natalie Adams
1993 *Life in the Pee Dee: Prehistoric and Historic Research on the Roche Carolina Tract, Florence County, South Carolina.* Research Series 39. Chicora Foundation, Inc., Columbia.

Trinkley, Michael and Olga M. Caballero

- 1983 *Additional Archaeological, Historical, and Architectural Evaluation of 38HR127 and 38HR131, Horry County, South Carolina.* S.C. Department of Highways and Public Transportation, Columbia.

U.S. Army Corps of Engineers

- 1973 *Flood Plain Information — Waccamaw River, Kingston Lake Swamp, Crab Tree Swamp, City of Conway, South Carolina.* Charleston District, Corps of Engineers, Charleston, South Carolina.

Walthall, John A.

- 1980 *Prehistoric Indians of the Southeast: Archaeology of Alabama.* University of Alabama Press, University.

Ward, Trawick

- 1978 *The Archaeology of Whites Creek, Marlboro County, South Carolina.* Research Laboratories of Anthropology, University of North Carolina, Chapel Hill.

- 1983 *Whites Creek: The Second Time Around. South Carolina Antiquities* 15:63-65.

Williams, Stephen B.

- 1965 *The Paleoindian era: Proceedings of the 20th Southeastern Archaeological Conference. Southeastern Archaeological Conference Bulletin* 2.

Woofter, T.J., Jr.

- 1936 *Landlord and Tenant of the Cotton Plantation.* Research Monograph 5. Division of Social Research, Works Progress Administration, Washington, D.C.